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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/552,281	07/12/2006	Markus Gesk	10191/4099	2007	
26646 KENYON & K	7590 10/15/200 ENYON LLP	8	EXAMINER		
ONE BROADV	VAY	HOGAN, JAMES SEAN			
NEW YORK, NY 10004			ART UNIT	PAPER NUMBER	
			3752		
			MAIL DATE	DELIVERY MODE	
			10/15/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comment	10/552,281	GESK ET AL.				
Office Action Summary	Examiner	Art Unit				
	JAMES S. HOGAN	3752				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence add	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	J. ely filed the mailing date of this co O (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>15 Ju</u>	dv 2008					
	action is non-final.					
		eccution as to the	morite ie			
•	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under L	x parte Quayle, 1955 C.D. 11, 45					
Disposition of Claims						
4)⊠ Claim(s) <u>8-14</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>8-14</u> is/are rejected.	·					
7) Claim(s) is/are objected to.						
o) are subject to restriction aria, of	olootion roquiromont.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 LLS C & 119(a)	-(d) or (f)				
a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 0.0.0. § 115(a)	-(a) or (i).				
·—	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 					
_ .	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:						

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed July 17, 2008 have been fully considered but they are not persuasive. For the purposes of priority, the U.S. Patent Application Publication of Maier et al can, and will be, used for the remainder of prosecution. The use of the art of Reiter is argued in more detail, and shall remain.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0192965 to Maier et al. in view of U.S. Patent No. 6,039,271 to Reiter.

As per claim 8, Maier et al teaches part of a method for producing and securing an apertured disk for a fuel injector for a fuel-injection system of an internal combustion engine. Shown is an apertured disk (70) having an opening contour (73) which ensures a complete passage for a fluid, is shown as a flat, metallic sheet having a constant thickness and having introducing at least one spray-discharge opening (73) in the center region, and is secured on a valve-seat member of the fuel injector in such a way that a lower end face of the valve-seat member overlaps an intake region of the

apertured disk such that the at least one spray-discharge opening is covered. In step (b) of claim 8, Maier et al does not teach material thickness reduction.

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Reiter shows evidence of possible reducing thickness in one region of the sheets shown in Figure 1 by impressing a disk (34) into a valve seat of a fuel injector and by being welded around its bottom seam. It is the welding process that can, by any and all reasoning, provide an area of reduced thickness, as the amalgamation of any welding compound and the piece(s) being welded are bound to affect one another's microscopic thickness. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have reduced thickness in a material as in the disk of Maier et al as taught by Reiter, since it is known to reduce thickness by all forms of stamping and embossing, as both are known to have and affect on material by their implicit nature, and would further be desirable in order to provide a part with a desired thickness tolerance in order to ensure proper fitting into its designated placement within an apparatus.

As for, in step (c) of the claim, locating the opening in the region of reduced thickness, that thickness being reduced, (and as per claim 13) microscopically within the range of 0.05 mm to 0.01mm, that being the nature of material formed by impression, it would have been obvious to one having ordinary skill at the time the invention was made to have located the opening at a central point, as it is a natural location for such an opening.

Further, as in step (d) of the claim, the act of machining the sheet until an apertured disk has predefined outside dimensions attained is a known technique to one

of ordinary skill and does not hold any patentable weight as it is used universally in the fuel injector art.

As per claims 9 and 11, neither Maier et al not Reiter teach a particular material, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected as desired material for the disk, since it has been held to be within the skill of a worker to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice See in re Leshin, 125 USPQ 416.

As per claim 10, distributing excess material thrown up by embossing by further rolling the material is a known metalworking technique whose use is not given any patentable weight as it is used universally in the art.

As per claim 12, the act of grinding off excess material is a well known technique of material reduction, to one of ordinary skill and does not hold any patentable weight as it is used universally in the art of material modification.

As per claim 14, Maier et al teaches its spray-discharge opening as being formed by drilling, erosion, stamping (Col. 5, lines 42-46).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES S. HOGAN whose telephone number is (571)272-4902. The examiner can normally be reached on Mon-Fri, 6:00a-3:00p EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. H./
Examiner, Art Unit 3752
/Len Tran/
Supervisory Patent Examiner, Art Unit 3852